

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

Objections to the specification

The specification is presently objected to for certain informalities. In particular, the examiner notes that legal phraseology such as “means” should be avoided in the abstract.

The abstract has been amended to remove the term “means.” In view of the amended abstract, withdrawal of the objection is requested.

Claim objections

Claim 4 is presently objected to for certain informalities. In particular, the examiner notes that in line 3 of claim 4, “socket” should be “sockets.” Claim 4 has been amended to replace “socket” with “sockets.” Accordingly, withdrawal of the objection is requested.

Rejection of claim 6 under 35 U.S.C. § 112, second paragraph

Claim 6 presently stands rejected as being indefinite. Claim 6 has been cancelled, rendering the instant rejection moot.

Rejection of claims 1-5 under 35 U.S.C. § 103(a)

Claims 1-5 presently stand rejected as being unpatentable over Durigon (EP 0 745 744). This rejection is respectfully traversed for at least the following reasons.

Durigon does not disclose or suggest an elbow joint for insertion between a cleaning apparatus and a flexible hose wherein each end of the elbow includes a swivel connection and inlet and outlet ends of the elbow are included to each other at between 150 and 165 degrees.

The examiner acknowledges, in the recent Office action, that “Durigon fails to teach that the angle between the inlet and outlet ends is between 150 and 165 degrees,” but asserts that “it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Durigon’s elbow (154) such that the angle between the inlet and outlet ends is between 150 and 165 degrees.”

The examiner has provided no basis for the assertion that such a modification would have been obvious, and it is respectfully submitted that there is no motivation or suggestion for the modification.

Durigon states, with reference to Durigon’s Fig. 18, that “the body of the connector 154 is angled at 45° so that it accommodates pools in which the cleaner is forced to operate on angled surfaces” (*Durigon*; col. 6, lines 54-57). It can be noted that Durigon’s 45 degree angle corresponds to an angle of 135 degrees between the ends, as the angle is set forth in the presently claimed invention.

The present invention is concerned with providing directional control of an automatic pool cleaner to provide a random pattern of movement, and to avoid a tendency to remain stationary in corners or to follow the joint between bottom and sidewalls of the pool.

Durigon does not disclose or suggest any effect of the swivel connector 154 on steering of the disclosed cleaner. On the contrary, the only indicated function of the swivel connector 154 is “to prevent ‘wind-up’ of a hose”, and the entire description of the swivel connector provides only that “Figure 18 shows an angled swivel connector 154 which has a first end 156 which can clip rotatably to the outlet 18/218 of the cleaner and which has a second swivel joint 158 at its other end to prevent “wind-up” of a hose attached to the cleaner. The body of the connector 154 is angled at 45° so that it accommodates pools in which the cleaner is forced to operate on angled surfaces.” (*Durigon*; col. 6, lines 50-57).

Notably, Durigon does not refer to any range or variation of the angle of the connector, but merely states that “The body of the connector 154 is angled at 45°.” No

range is set forth, and no words of approximation are used (such as “about,” “near,” “approximately,” “for example,” or the like).

Thus, Durigon provides no other guidance than that a 45° angle accommodates pools in which the cleaner is forced to operate on angled surfaces. Therefore, Durigon does not provide any motivation or suggestion to try different angles for different purposes, but only the guidance that Durigon, apparently, finds the 45° angle to be optimal to accommodate angled surfaces.

Applicant respectfully submitted that the 45° angled (135° between ends) elbow does not provide directional control to provide a random pattern of movement because the angularity tends, in use, to lift the pool cleaner off the pool floor, or to push downward on the cleaner causing the back of the suction pad to lift off the pool floor.

Therefore, the solution Durigon has chosen and stated in precise, absolute terms, differs from the present invention wherein an angular range of the elbow is determined to be effective in providing directional control for the cleaner.

In contrast, the lesser-bent (greater angle between elbow ends) elbow of the present invention results in an improvement in directional control and function of the pool cleaner which is nowhere disclosed or suggested by Durigon.

Accordingly, it is respectfully submitted that Durigon does not form a prima facie case of obviousness of the claimed invention because Durigon does not teach or suggest each and every element set forth in claim 1, and because there is no motivation or suggestion for any modification of Durigon that would lead to the presently claimed invention.

Conclusion

In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1-5 be allowed and the application be passed to issue.

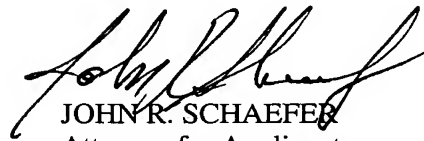
Application No.: 10/539,059
Examiner: James M. Hewitt
Art Unit: 3679

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown.

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Date: April 17, 2007

Respectfully submitted,



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